

#### Michael O. Leavitt Governor Dianne R. Nielson, Ph.D. Executive Director Don A. Ostler, P.E.

# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 West P.O. Box 144870 Salt Lake City, Utah 84114-4870 (801) 538-6146 Voice (801) 538-6016 Fax (801) 536-4414 T.D.D.



MOUSO17 PLS FILE

April 21, 1995

CERTIFIED MAIL (Return Receipt Requested)

Dave Beatty
Environmental/Occupational Health Coordinator
Barrick Mercur Gold Mine
P.O. Box 838
Tooele, Utah 84074

RE:

Notice of Violation for the Accidental Release of Barren Solution, Valley Fill Leach Area #3, Permit No. UGW450001; Annual Ground Water Permit Inspection Report Transmittal

Dear Mr. Beatty:

This is in response to the release of March 13, 1995, a release of approximately 11,250 gallons of Barren solution from the mill pump-back pipeline, approximately 200 yards east of Valley Fill Area #3. We acknowledge receipt of your letter of March 14, 1995, concerning the release. In summary, you estimated that about 40% of the fluid escaped the containment culvert and flowed down the right-of-way, ponding on the east roadway near the heap leach. This fluid, along with accumulated snow melt, was captured and returned to the heap leach. Thus, the amount of fluid not contained or captured was minimal. However, Part I.D.6(a) of the permit requires that Barrick design and maintain its' pipeline systems to "prevent any spills or leakage from contact with the ground surface or ground water." The culvert that contains the mill pump-back pipeline could not entirely prevent the escape of fluids from the ruptured pipe. It is our conclusion that regardless of the percentage of fluids from the spill that were contained or captured, the incident is still in violation of the BAT standard of the ground water permit.



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Fortunately the problem was discovered within a short period and the location of the incident was conducive to the rapid response employed by Barrick. Next time the circumstances might not be so user friendly and you should consider whatever appropriate measures are necessary to prevent future, and perhaps more serious, releases of this kind.

It is our finding that Barrick has not fully met the second affirmative defense requirement of Part III.F of the above referenced permit with respect to this incident. It appears that inadequate design allowed the fluids to escape containment following the rupture of the pipeline.

Your letter of March 14, 1995, indicated that Barrick would evaluate the need for any corrective actions to prevent reoccurrence of this type of incident. We would suggest that at a minimum Barrick specify operational procedural modifications that stipulate that during pumping the pipeline will be continually observed so that potential future occurrences will be detected as soon or sooner than the recent incident. Another possibility would be the installation of pressure sensitive devices that would provide immediate warning of sudden drops of pressure within the pipeline. The third and obviously most expensive option would be to retrofit the entire length of pipeline with a total containment design. In your evaluation, you need to recall that two additional pipeline releases have been reported since 1990. Thus, although these incidents are not numerous, reoccurrence of this type of incident is probable. Because Barrick has yet to specify a plan and schedule to meet permit conditions with respect to the prevention of spills from this pipeline we cannot consider Barrick to have demonstrated sufficient compliance with the third affirmative defense requirement of the permit.

Compliance with the other two affirmative defense requirements has been demonstrated. The telephone and written notices of March 14, 1995 satisfy the reporting requirements of the first affirmative defense requirement. Because the discharge probably will have no impact on waters of the state and because no endangerment to the public or the environment occurred the fourth affirmative defense requirement has apparently been achieved. Although not all of the affirmative defense requirements were met, it is our decision that we do not intend to pursue this matter further at this point in time, provided Barrick adequately addresses the issues discussed above.

Any further administrative proceedings in this matter shall be conducted under UCA subsections 63-46b-6 through 63-46b-14 inclusive; and UAC R317-1-8. This Notice of Violation shall be considered final should no written request for a hearing, under the above referenced provisions, be received within 30 days of receipt of this letter. Violations of the Act or Rules or permits thereunder are subject to the penalty provisions of UCA 19-5-115.

Please find the enclosed annual ground water permit compliance inspection report. No further violations were noted during the inspection of April 5, 1995. We would like to point out that the detection of arsenic in three of the past five monthly samplings of monitoring well MW-13 is a situation that must be closely monitored and evaluated.

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We understand that the April duplicate sample from area #3 will be from MW-13 in an effort to shed further light on this issue. If you have any questions concerning this letter please contact Dennis Frederick at 538-6146.

Sincerely,

Utah Water Quality Board

Nm a. Other

Don A. Ostler, P.E.

Executive Secretary

Enclosure

DAO:DAF:wfm

cc: Brian Slade, Tooele County Health Department Attorney General's Office (w/o enclosure)

Tom Many DOCM

Tom Munson, DOGM

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### GROUND WATER INSPECTION REPORT

Company Barrick Mercur Mine		Product Heap Leach Area #3			
County Tooele	Address Merci	ur Canyon; Tooele Canyo	n; Utah	Date_4/5/95	
Company Representatives <u>Dave Beatty/</u>	John Worthen & C	Glen Eurick/Gorden Dorne	y (Preconv	verence Only)	Phone 268-4447
State and County Inspector(s) Dennis F	rederick (Utah Div	. of Water Quality) Bria	n Slade (T	ooele County He	alth Dept.)
Reason for Inspection Annual Permit Inspection		Visit Expected YES		Warra	int_NO
Company Permits: Ground Water YES		UPDES YES	Constr	uction <u>YES</u>	
Pre-inspection Conference	Yes YES	No	<del></del>	Discussions Y	<u>ES</u>
Type of Inspection: Construction_	<del></del>	Operating YES	Closur	e	Other
Weather conditions Sunny and	warn mid to lowe	or 60's			•
Adequacy of facility Records F	excellent	1 00 3	<del></del>		· · · · · · · · · · · · · · · · · · ·
		ecifications All four wells	showed n	o visible surface	damage
Static Water Levels no	ot measured at this	time	SHOWCU II	o visible surface	damage.
Water Quality not mea				**	
		, Inc." and internal onsit	e laborator	v	
Instrumentation adequa	ate? Checked flow	meters at plant site and ci-	stern water	level meter at ed	ge of heap, both OK
Condition of Equipme	nt Measuring device	ces and plant proocess ite	ms appeare	ed in good condit	ion.
Condition of wells, liners, pads	, pipelines location	of pipeline rupture was	repaired an	d restored to pre	-spill configuration
Storage areas, containers Entire	process pond is wit	hin concreted berm area, w	vhich seem	ed in good repair	including the sealing
of all cracks.					
Landfills and impoundments no					
Pipelines Site of pipeline ruptur	re was repaired, pir	peline and containment m	ay not be	adequate to preve	ent future releases
GW Models not applicable					
Consultant reports not applicab	<u>le</u>				
Spills or releases Spill was con-	veyed down access	road to low lying area fro	om which i	t was pumped dis	rectly on to the heap
leach. Ponding occurred near monitoring	<u>z well MW-11, cou</u>	ald potentially impact futu	ire samplin	g.	
Corrective actions Barr	ick will propose co	rrective actions (concerning	ng pipeline	) after they have i	reviewed the options
Reports not applicable					
Hazardous Wastes or unusual c	onditions <u>not appli</u>	cable			
General Comments Overall facility oper	ation and managen	nent are geared towards n	neeting req	uirements of perr	mit.
Water Samples Collected (Lab Numbers	) collected previou	sly			
Photographs_none					
Closing Conference not held					
Findings, violations, & corrective actions in 3 of last 5 MW-13 samples. Request	s Should site Barriced duplicate sample	ck for minor permit viola ing of MW-13 during Ap	tion becaus	se of recent releasede additional dat	se. Arsenic detected
Summary of Deficiencies <u>Pipeline Spill</u> Arsenic problem.	= NOV on BAT;	Continuing exceedence of	f permit pr	otection limits fo	or TDS and possible
Signature			Compa	ny Sent Copy	

#### Additional Inspection Notes

Upper and Lower leakage detection system drainage tanks were checked for the pressence of fluids. No fluids were present in the tank from the lower leakage detection system. Several full and empty gallon containers and a measuring column were in the upper system's tank. This system typically reieves 20-40 gallons per month.

The head on the upper FML was measured at 21.4 feet which is within the permit limit of 30 feet.